

<b>Mattingly Products Company, Inc.</b>	)	<b>Departmental</b>
<b>Somerset County</b>	)	<b>Findings of Fact and Order</b>
<b>North Anson, Maine</b>	)	<b>Air Emission License</b>
<b>A-123-71-H-M</b>	)	<b>Amendment #1</b>

After review of the air emissions license minor revision application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

## **I. REGISTRATION**

### **A. Introduction**

1. Mattingly Products Company, Inc. of North Anson, Maine was issued Air Emission License A-123-71-G-R on April 4, 2001 permitting the operation of emission sources associated with their North Anson, Maine asphalt batch plant, concrete batch plant and crushed stone facility.
2. Mattingly Products Company, Inc. has requested a minor revision of their air emissions license to allow for the removal of two diesel units rated at 115 kW and 140 kW and replace them with a 355kW diesel unit.
3. Mattingly Products Company, Inc. will also make a change in the fuel used at their facility **from** #2 fuel oil with a sulfur content of 0.5% by weight **to** diesel fuel with a sulfur content of 0.05% by weight.
4. This amendment also establishes a fuel use limit of diesel fuel in the diesel generator units of 40,000 gallons per year based on at twelve month rolling total. Compliance will be based on limiting hours per year of operations of the diesel units based on a twelve month rolling total.

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**B. Emission Equipment**

Mattingly Products Company, Inc. is applying to include the operation of the following equipment to its air emissions license:

**Fuel Burning Equipment**

<b><u>Equipment</u></b>	<b><u>Maximum Capacity (MMBtu/hr)</u></b>	<b><u>Power Output (kW)</u></b>	<b><u>Maximum Firing Rate (gal/hr)</u></b>	<b><u>Fuel Type, % sulfur</u></b>
Diesel #1	0.59	60	4.3	Diesel fuel, 0.05%
Diesel #3	2.24	230	16.4	Diesel fuel, 0.05%
Diesel #5	3.46	355	25.3	Diesel fuel, 0.05%

**C. Application Classification**

A modification at a facility with a licensed emissions increase of under (4) four TPY for any one regulated pollutant and under (8) eight TPY for total pollutants is determined to be a minor revision and not a major or minor modification. This amendment is determined to be a minor revision and has been processed as such.

**II. BEST PRACTICAL TREATMENT (BPT)**

**A. Introduction**

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Bureau of Air Quality regulations. BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

**B. Emissions Units**

Mattingly Products Company, Inc. operates an asphalt batch plant, a concrete batch plant and primary and secondary rock crushers at their North Anson facility. Mattingly Products Company, Inc. operates four diesel engines for producing power to run the equipment at their facility. Diesel Generator #1 is a 60 kW diesel generator set. Diesel Drive #2 is a 115 kW engine and is the drive for the Secondary Rock Crusher. Diesel Generator #3 is a 230 kW diesel generator set. Diesel Generator #4 is a 140 kW generator set.

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Mattingly Products Company, Inc. proposes to remove the current diesel engines #2 and #4. These engines will be replaced with a 355 kW diesel generator set designated Diesel Generator #5.

A summary of the BACT analysis for the new Diesel Generator #5 is as follows:

1. BACT for new diesel engines is use of diesel fuel oil with a sulfur content of 0.05% sulfur by weight.
2. The PM/PM<sub>10</sub> limits are derived from Chapter 103.
3. NO<sub>x</sub>, CO, VOC emissions rates are based on AP-42 emission factors for boilers of less than 600 HP dated 10/96.
4. Visible emissions limits are based on performance data from similar diesel fuel fired boilers of this size and age:

Visible emissions from each diesel engine stack shall not exceed 20% opacity on a six-minute block average, except for no more than 2 six-minute block averages in a 3-hour period.

**C. Annual Emission Restrictions**

Mattingly Products Company, Inc. shall be restricted to the following annual emissions, based on a 12 month rolling total:

- Total annual facility fuel use shall be limited to 150,000 gallons of diesel fuel with a sulfur content not to exceed 0.05% by weight.
- Total facility fuel use of diesel fuel in the diesel generator units shall be limited to 40,000 gallons per year based on at twelve month rolling total.

**Total Allowable Annual Emission for the Facility**  
(used to calculate the annual license fee)

<b><u>Pollutant</u></b>	<b><u>Tons/Year</u></b>
PM	2.3
PM <sub>10</sub>	2.3
SO <sub>2</sub>	5.6
NO <sub>x</sub>	19.9
CO	5.8
VOC	3.1

### III.AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a non major source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source. An air quality analysis is not required for this amendment.

### ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Amendment A-123-71-H-M subject to the conditions found in Air Emission License A-123-71-G-R and in the following conditions:

**The following condition shall replace condition (16) paragraph g. in Air Emission License A-123-71-H-M:**

- (16) g. The asphalt kiln shall be limited to a maximum of 16.4 MMBtu/hr heat input firing diesel fuel oil with a sulfur content not to exceed 0.05 % sulfur by weight.

**The following condition shall replace condition (19) in Air Emission License A-123-71-H-M:**

- (19) Diesel Units
- A. Facility fuel use for the diesel units shall not exceed 40,000 gals/yr of diesel fuel with a sulfur content not to exceed 0.05% sulfur by weight based on a 12-month rolling total. Compliance will be based on limiting diesel unit hours of operation per year based on a twelve month rolling total. Compliance shall be demonstrated based on hourly operating time meter records and fuel use records.
  - B. Mattingly Products Company, Inc. shall install operating time meters on the diesel units.

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- C. Mattingly Products Company, Inc. shall maintain fuel use records indicating fuel usage for each diesel unit and hours of operation for each diesel unit. Mattingly Products Company, Inc. shall calculate fuel usage based on diesel firing rates and hours of operation (hours of operation multiplied by gallon per hour firing rate equals fuel burned). The diesel firing rates for each diesel are as follows:

<b><u>Equipment</u></b>	<b><u>Maximum Firing Rate (gal/hr)</u></b>
Diesel #1	4.3
Diesel #3	6.4
Diesel #5	25.3

- D. Fuel use records shall be maintained on a monthly basis, in addition to the 12-month rolling total.
- E. Mattingly Products Company, Inc. shall maintain a log of fuel receipts from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel.
- F. Fuel use records and receipts indicating percent sulfur content for Diesel Generator #1, Diesel Generator #3, and Diesel Generator #5 shall be maintained for at least (6) six years and available upon request to the Department. Past fuel use records and receipts for Diesel Drive #2, Diesel Generator #4 shall be kept in record for (6) six years after their removal from service.

- G. Diesel emissions shall not exceed the following:

<b>Equipment</b>		<b>PM</b>	<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>VOC</b>
Diesel #1	lb/hr	0.2	0.2	0.03	2.6	0.6	0.2
Diesel #3	lb/hr	0.7	0.7	0.1	9.9	2.1	0.8
Diesel #5	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.4	0.4	0.2	15.3	3.3	1.2

- H. Visible Emissions

Visible emissions from each diesel engine stack shall not exceed 20% opacity on a six-minute block average, except for 2 six-minute block averages in a 3-hour period.

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**The following are new conditions to Air Emissions License A-123-71-G-R**

- (26) Mattingly Products Company, Inc. shall pay the annual air emission license fee within 30 days of December 31 of each year. Pursuant to 38 MSRA §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for the revocation of the license under 38MRS §341-D, Subsection 3.
- (27) This amendment shall expire concurrently with Air Emission License A-123-71-G-R.

DONE AND DATED IN AUGUSTA, MAINE THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 2002.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
 MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: **April 18, 2002**

Date of application acceptance: **April 25, 2002**

Date filed with the Board of Environmental Protection: \_\_\_\_\_

This Order prepared by, Peter G. Carleton, Bureau of Air Quality